City of Phoenix
Development Services Department

Engineered Fill Plan
Checklist

KIVA No: _____ **Project Name:** _____

Reviewed by: **Phone Number:** **Date:**

The purpose of this checklist is to offer comments on plans for construction of cuts, fills, and drainage facilities on private property and in the public right of way. The Engineered Fill is intended to remain in place for a period of time before buildings or other facilities are constructed.

This checklist serves to minimize redline comments on the check prints and to maintain consistency among plan reviewers. Plan approval, issuing permits, and certain grading clearances depend on compliance with the comments made on the check prints and this checklist. The engineer of record shall satisfy themselves of the completeness and accuracy of the design.

Please return this checklist and the check prints with your next submittal. Plan approvals are valid for a period of one (1) year from the date of the approval.

This publication can be made available in alternate formats (Braille, large print, electronic, or audiotape) upon request. Contact the Development Services Department at (602) 262-7811 (voice) or (602) 534-5500 (TTY).

The following symbols are used to identify changes needed to the plans.

[X] REQUIRED **[√] O.K.**

An Engineered Fill Plan is approved as a convenience to the developer. The City is not obligated to approve an Engineered Fill Plan.

[ ] Information required on plans:

- **[ ] Engineer's name, address and phone number.**
- **[ ] Vicinity map with north arrow (on cover sheet).**
- **[ ] Property owner's name, address, and phone number (on cover sheet).**
- **[ ] Address and legal description of project location.**
- **[ ] Legend identifying grades, symbols, lines and drainage patterns.**
- **[ ] Appropriate processing numbers including: KIVA, SDEV, CSPR or CCPR , Building Log, Abandonment, and City Quarter Section Number in the lower right corner.**
- **[ ] Elevation datum and bench marks (City datum required). Telephone (602) 495-2050, ext. 265, to obtain City datum for given benchmark closest to project site.**
- **[ ] Vertical scale shall be 1" = 2' or 1" = 4'. Horizontal scale shall not be smaller than 1" = 40'. For major streets and cases of unusual topography or complex situations, where more detail is necessary, then the scale shall be 1" = 20'.**

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

_____ _____

REGISTERED LAND SURVEYOR/ ENGINEER **DATE**

_____

REGISTRATION NUMBER

In addition, specify the name, address, and telephone number of the Registered Engineer, Land Surveyor, and Soils Laboratory providing as-builts and final soils/compaction reports.

[ ] Arizona Registered Civil Engineer's seal and signature (on each sheet).

[ ] Scale selected for each sheet, north arrow decal.

[ ] Show the limits of any 100-year designated floodplain and include applicable 100-year water surface elevation lines which traverse the project site.

[ ] Existing contours or spot elevations, drainage arrows, and grade breaks to indicate drainage patterns. Also indicate all 100-year flows from contributing offsite drainage areas.

[ ] Spot elevations on adjacent properties sufficient to depict existing conditions affecting drainage of property to be filled. Generally, 50 feet beyond line will be sufficient.

[ ] Blue Stake notification decal.

[ ] The proposed grading should be designed with slopes and topography features which match the natural grade and context area.

[ ] Engineering Fill Plans showing an existing natural wash shall also show existing conditions, including line and grade of the wash flow line at 50-foot intervals. Show distances between banks and elevations on the banks of the wash at 50-foot intervals, both existing and proposed.

[ ] Show details at property lines, fences, berms, etc. Also show improvements on adjacent property which affects or may be affected by the proposed development.

[ ] Provide net acreage of site and dimension all property boundaries.

[ ] Fills should be designed to minimize erosion. Erosion protection is required where slopes are excessive and/or storm water velocities exceed 5 fps. Fills shall be constructed to minimize silt transport to private property or into public right of way.

[ ] Engineered Fill Plans shall indicate a mechanism for dust, weed, and debris control on undeveloped portions of the site and shall describe methods for continuing compliance.

[ ] Temporary retention basins or berms shall be constructed to contain potential runoff from a 100-year storm of 2-hour duration.

[ ] Standard notes on Engineered Fill Plans:

[ ] An Engineered Fill Permit is required under Chapter 32A of the Phoenix City Code.

[ ] Haul permits, when required, must be obtained prior to or concurrently with the Engineered Fill Permit.

[ ] Plan approval is valid for twelve months. If construction is not started within twelve months of approval, the plans must be resubmitted for an update review and approval.

[ ] Development Services Department's Field Inspection Group shall be notified 48 hours before any on-site construction begins, telephone (602) 262-7811.

[ ] A separate permit is necessary for any offsite construction.

[ ] Before grading in areas containing native desert vegetation, the contractor must obtain a permit from Arizona Department of Agriculture. For information, phone 602) 255-4933 or 542-0994.

[ ] Contractor shall obtain a letter of permission from adjacent property owners to perform grade to match.

[ ] An approved Engineering Fill Plan shall be on the job site at all times. Deviations from the plan must be preceded by an approved plan revision.

[ ] The site of an Engineered Fill Plan shall be posted "NO DUMPING" per the applicable City Ordinances. The site may be registered as a "NO DUMPING" site with the Phoenix Police Department upon application and payment of fees. The site may also be protected from dumping by constructing physical barriers such as berms and trenches, fences, or the like.

[ ] Engineered fill materials shall consist of clean fill—free of construction debris—vegetation, and other deleterious material not suited for permanent fills.

[ ] All drainage protective devices such as swales, interceptor ditches, pipes, protective berms, concrete channels, or other measures designed to protect adjacent buildings or property from storm runoff must be completed prior to request for final inspection.

[ ] Optional Note, Channel Diversion:

CONSTRUCTION MUST BE PHASED SO THE NEWLY ALIGNED CHANNEL IS FULLY OPERATIONAL BEFORE THE EXISTING DRAINAGE CHANNEL IS FILLED. FLOOD WATER CONVEYANCE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

[ ] This property is adjacent to the Phoenix Mountain Preserve, no disturbance of preserve property for access, grading, or other construction purposes will be allowed. The contractor is required to delineate the Mountain Preserve boundary with a fence, string line, or other acceptable methods.

[ ] Soils compaction test results must be submitted to the Development Services Field Inspection office for fills where one foot or more of fill material is indicated. This information must be supplied prior to request for final inspection, pursuant to City Code Sec. 32A.

[ ] Approval of these plans shall not prevent the City from requiring correction of errors in the plans where such errors are subsequently found to be in violation of any law or ordinance.

[ ] Information required with the plans:

- **[ ] Cut and fill quantities. This should also be placed on the plan cover sheet.**
- **[ ] Calculations for required 100-year, 2-hour, on-site retention.**
- **[ ] A drainage study of the site and contributing areas.**

[ ] Additional requirements:

- **[ ] Sheets to be 24" X 36", submit three sets of Engineered Fill Plans.**
- **[ ] All notes and details on the plans must be readable. Minimum suggested character size is 1/8 inch.**

[ ] Retaining walls are to be built under a permit issued by Development Services' Building Safety section, and inspections will be performed by Building Safety Inspectors.

[ ] Damaged and/or displaced concrete curb, gutter, sidewalk, or driveway slab that is within the right of way shall be repaired or replaced before final acceptance of the work.

[ ] A performance bond based on $2.00/yd.^{3} of fill placed shall be posted prior to issuance of the permit. The approved bond form is available at the Project Engineering permit counter.

[ ] This project is subject to the Arizona Pollution Discharge Elimination System (AZPDES) requirements for construction sites under the Arizona Department of Environmental Quality (ADEQ) General Permit. Owners, developers, engineers, and/or contractors are required to prepare all documents required by this regulation, including but not limited to: SWMP, NOI, NOT. The requirements and guidance for the preparation of the SWMP are available in the "Drainage Design Manual for Maricopa County Volume III Erosion Control" available at the Flood Control District, 2801 West Durango, Phoenix, AZ 85009, (602) 506-1501. The NOI and NOT forms are available from the ADEQ website:

http://www.adeq.state.az.us/environ/water/permits/download/constnoi.pdf
http://www.adeq.state.az.us/environ/water/permits/download/constnoti.pdf

More information regarding discharge to City of Phoenix Storm Sewer System and/or Maricopa County Flood Control District structures can be obtained by contacting your professional organization.

[ ] Discussion of redline comments on plans or in this checklist should be directed to the plan reviewer.

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